March 28, 2003

RE: *Noble Composites 039-16140-00556*

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky

Chief, Permits Branch Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, within (18) eighteen days of the mailing of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office

of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure FNPER.wpd 8/21/02

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



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Governor

Lori F. Kaplan Commissioner P. O. Box 6015 Indianapolis, Indiana 46206-

6015

(317) 232-8603 (800) 451-6027

www.state.in.us/idem

100 North Senate Avenue

Mr. Larry Farver Noble Composites, Inc. 2424 East Kercher Road Goshen, Indiana 46526

March 28, 2003

Re: 039-16140-00556

First Significant Permit Revision to

MSOP 039-14254-00556

Dear Mr. Farver:

Noble Composites, Inc., was issued a minor source operating permit on August 9, 2001, to construct a fiberglass and wood reinforced plastic flat panel manufacturing plant. A letter requesting a revision to this permit was received on September 23, 2002. Pursuant to the provisions of 326 IAC 2-6.1-6, a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of changes in the VOC and HAP limits for the use of resins and gel coats in the existing fiberglass panel manufacturing line from 100 tons per twelve (12) consecutive month period to 245 tons per twelve (12) consecutive month period. There are no new construction activities associated with this permit revision.

Pursuant to 326 IAC 2-6.1-6, the minor source operating permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please find attached a copy of this revised permit.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely, Original signed by Paul Dubenetzky, Chief Permits Branch Office of Air Quality

ERG/YC

cc: File - Elkhart County U.S. EPA, Region V

Elkhart County Health Department

Northern Regional Office

Air Compliance Section Inspector - Paul Karkiewicz

Compliance Data Section - Karen Nowak Administrative and Development - Sara Cloe Technical Support and Modeling - Michele Boner

Recycle

Indiana Department of Environmental Management



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NEW SOURCE CONSTRUCTION PERMIT and MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

Noble Composites, Inc. 2424 East Kercher Road Goshen, Indiana 46526

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1 if new source, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

| Operation Permit No.: MSOP 039-14254-00556 | | |
|--|---------------------------------------|--|
| Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality | Issuance Date: August 9, 2001 | |
| | | |
| First Significant Permit Revision No.: 039-16140-00556 | Pages affected: 4, 16, 17, 19, 24, 27 | |
| | | |

Indiana Department of Environmental Management

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Issued by: *Original signed by*Paul Dubenetzky, Branch Chief
Office of Air Quality

Issuance Date: *March 28, 2003*

Noble Composites, Inc. First Significant Permit Revision: 039-16140-00556 Page 3 of 29 Goshen, Indiana Modified by: ERG/YC MSOP 039-14254-00556

Permit Reviewer: ERG/KC

TABLE OF CONTENTS

| A.1 A.2 A.3 | General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)] Emission Units and Pollution Control Equipment Summary Part 70 Permit Applicability [326 IAC 2-7-2] |
|-------------------|---|
| SECTION B B.1 | GENERAL CONSTRUCTION CONDITIONS Permit No Defense [IC 13] |
| B.1 B.2 | Definitions |
| B.2 B.3 | Effective Date of the Permit [IC 13-15-5-3] |
| B.4 | Revocation of Permits [326 IAC 2-1.1-9(5)] |
| B.5 | Modification to Permit [326 IAC 2] |
| B.6 | Minor Source Operating Permit [326 IAC 2-6.1] |
| SECTION C | SOURCE OPERATION CONDITIONS |
| C.1 | Major Source |
| C.2 | Preventive Maintenance Plan [326 IAC 1-6-3] |
| C.3 | Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6] |
| C.4 | Source Modification [326 IAC 2-7-10.5] |
| C.5 | Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)] |
| C.6 | Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)] |
| C.7 | Permit Revocation [326 IAC 2-1-9] |
| C.8 | Opacity [326 IAC 5-1] |
| C.9 | Stack Height [326 IAC 1-7] |
| Test | ing Requirements |
| C.10 | Performance Testing [326 IAC 3-6] |
| | pliance Monitoring Requirements |
| C.11 | |
| C.12 | |
| C.13 | Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6] |
| | ord Keeping and Reporting Requirements |
| C.14 C.15 | ' ' |
| C.15 C.16 | · · · |
| | 0 ,1 11 1 |
| C.17 C.18 | |
| C.18 C.19 | , |
| SECTION D. | 1 EMISSIONS UNIT OPERATION CONDITIONS |
| | |

Emission Limitations and Standards

- D.1.1 New Source Toxics Control [326 IAC 2-4.1-1] and VOC [326 IAC 8-1-6]
- D.1.2 Particulate [326 IAC 6-3-2(d)
- D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

Compliance Determination Requirements

- D.1.4 Testing Requirements [326 IAC 2-1.1-11]
- D.1.5 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs) [326 IAC 8–1-2][326 IAC 8-1-4]

First Significant Permit Revision: 039-16140-00556 Modified by: ERG/YC

Page 4 of 29 MSOP 039-14254-00556

TABLE OF CONTENTS (Continued)

Compliance Monitoring Requirements

- D.1.6 Monitoring
- D.1.7 Visible Emissions Notations

Record Keeping and Reporting Requirements

- D.1.8 Record Keeping Requirements
- D.1.9 Reporting Requirements

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emission Limitations and Standards

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Limitations and Standards

Malfunction Report MSOP Quarterly Report

First Significant Permit Revision: 039-16140-00556 Modified by: ERG/YC

Page 5 of 29 MSOP 039-14254-00556

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary fiberglass and wood reinforced plastic flat panel manufacturing plant.

Authorized Individual: President

Source Address: 2424 East Kercher Road, Goshen, Indiana 46526 Mailing Address: 2424 East Kercher Road, Goshen, Indiana 46526

Phone Number: (574) 534-0010 SIC Code: 3083 County Location: Elkhart

County Status: Attainment for all criteria pollutants
Source Status: Minor Source Operating Permit

Minor Source, under PSD or Emission Offset Rules; Major Source, Section 112 of the Clean Air Act

Not 1 of 28 Source Categories

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) Two (2) gel coat tunnels, identified as EU 1 and EU 2, constructed in 2001, each with a maximum of 7.5 molds per hour, both equipped with dry filters for particulate control and exhausting to stack EFG 1;
- (b) One (1) laminating tunnel, identified as EU 3, constructed in 2001, with a maximum of 7.5 molds per hour, equipped with dry filters for particulate control and exhausting to stack EFL 2;
- (c) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations;
- (d) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone;
- (e) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:
 - (1) Various building heaters;

First Significant Permit Revision: 039-16140-00556 Modified by: ERG/YC

Page 6 of 29 MSOP 039-14254-00556

- (f) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air-filtration equipment;
- (g) Paved and unpaved roads and parking lots with public access; and
- (h) Sources emitting greater than one (1) pound per day but less than twelve and a half (12.5) pounds per day or two and a half (2.5) tons per year of any combination or HAPs:
 - (1) Two (2) six thousand (6000) gallon bulk tanks for storing liquid polyester resin.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22).

Goshen, Indiana Permit Reviewer: ERG/KC

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Page 7 of 29

B.2

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.
 - If the Affidavit of Construction verifies that the facilities covered in this Construction (1) Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to

First Significant Permit Revision: 039-16140-00556 Modified by: ERG/YC Page 8 of 29 MSOP 039-14254-00556

326 IAC 2-7-19 (Fees).

(e) Pursuant to 326 IAC 2-7-4(a)(1)(A)(ii) and 326 IAC 2-5.1-4, the Permittee shall apply for a Title V operating permit within twelve (12) months of the date on which the source first meets an applicability criterion of 326 IAC 2-7-2.

Page 9 of 29 MSOP 039-14254-00556

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

C.1 Major Source

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21, and 326 IAC 2-7 (Part 70 Permit Program) this source is a major source.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Source Modification [326 IAC 2-7-10.5]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-10.5 whenever the Permittee seeks to construct new emissions units, modify existing emissions units, or otherwise modify the source.

First Significant Permit Revision: 039-16140-00556 Page 10 of 29

Modified by: ERG/YC MSOP 039-14254-00556

Noble Composites, Inc. Goshen, Indiana Permit Reviewer: ERG/KC

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

C.5 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.6 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.7 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

First Significant Permit Revision: 039-16140-00556 Page 11 of 29

Modified by: ERG/YC MSOP 039-14254-00556

Noble Composites, Inc. Goshen, Indiana Permit Reviewer: ERG/KC

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.8 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.9 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

Testing Requirements

C.10 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015 First Significant Permit Revision: 039-16140-00556 Page 12 of 29

Modified by: ERG/YC MSOP 039-14254-00556

Noble Composites, Inc. Goshen, Indiana Permit Reviewer: ERG/KC

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.11 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

Page 13 of 29

MSOP 039-14254-00556

Noble Composites, Inc. Goshen, Indiana Permit Reviewer: ERG/KC

- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2)The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3)An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- Records shall be kept of all instances in which the compliance related information was not (d) met and of all response steps taken.

Record Keeping and Reporting Requirements

C.14 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality(OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

First Significant Permit Revision: 039-16140-00556 Page 14 of 29

Modified by: ERG/YC MSOP 039-14254-00556

Noble Composites, Inc. Goshen, Indiana Permit Reviewer: ERG/KC

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

- (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
- (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.16 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

First Significant Permit Revision: 039-16140-00556 Modified by: ERG/YC

Page 15 of 29 MSOP 039-14254-00556

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.17 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C Compliance Monitoring Plan Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.18 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

First Significant Permit Revision: 039-16140-00556 Modified by: ERG/YC Page 16 of 29 MSOP 039-14254-00556

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.19 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Quality Indiana Department of Environmental Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

First Significant Permit Revision: 039-16140-00556 Modified by: ERG/YC

Page 17 of 29 MSOP 039-14254-00556

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

- (a) Two (2) gel coat tunnels, identified as EU 1 and EU 2, constructed in 2001, each with a maximum of 7.5 molds per hour, both equipped with dry filters for particulate control and exhausting to stack EFG 1;
- (b) One (1) laminating tunnel, identified as EU 3, constructed in 2001, with a maximum of 7.5 molds per hour, equipped with dry filters for particulate control and exhausting to stack EFL 2;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 New Source Toxics Control [326 IAC 2-4.1-1] and VOC [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, MSOP #039-14254-00556, issued on August 9, 2001, and modified in this permit revision, the fiberglass panel manufacturing operation is subject to the requirements of 326 IAC 8-1-6 because the potential emissions are greater than twenty-five (25) tons per year and there are no other applicable Article 8 rules that apply. This rule requires that the Best Available Control Technology (BACT) be used to control VOC emissions. BACT for this new source shall be satisfied by the MACT determination of 326 IAC 2-4.1 (New Source Toxics Control).

Pursuant to the MACT determination under 326 IAC 2-4.1-1, operating conditions for the new fiberglass panel manufacturing operation shall be the following:

- (a) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit volatile organic HAP from use of such resins and gel coats only shall be less than two hundred forty five (245) tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit shall be determined based upon the following criteria:
 - (1) Monthly usage by weight, content of monomer that is HAP, method of application, and other emission reduction techniques used for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the HAP monomer content, method of application, and other emission reduction techniques used for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAQ.
 - (2) The emission factors approved for use by IDEM, OAQ shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, July 2001. For HAP-emitting operations not addressed by this reference, emission factors shall be taken from U.S. EPA's AP-42 document. For the purpose of these emission calculations, HAP monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.
- (b) The HAP monomer content of resins and gel coats used shall be limited to the following or their equivalent on an emission mass basis:

Page 18 of 29 MSOP 039-14254-00556

| Type of Gel Coat or Resin | HAP Monomer Content, % by weight |
|----------------------------------|----------------------------------|
| Production ¹ Gel Coat | 36 |
| Tooling Gel Coat | 45 |
| Production Resin | 35 |
| Tooling Resin | 43 |

¹ Production refers to the manufacture of parts

HAP monomer contents shall be calculated on a neat basis, which means excluding any filler. Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis.

Gel coats or resins with HAP monomer contents lower than those specified in the table in this subsection or additional emission reduction techniques approved by IDEM, OAQ may be used to offset the use of gel coats or resins with HAP monomer contents higher than those specified in the table in this subsection. This is allowed to meet the HAP monomer content limits for resins and gel coats and shall be calculated on an equivalent emissions mass basis as shown below:

(Emissions for higher than compliant HAP monomer content resin or gel coat) - (Emissions from compliant resin or gel coat) - (Emissions from compliant resin or gel coat) - Emissions from lower than compliant HAP monomer content resin or gel coat and/or using other emission reduction techniques).

Where:

Emissions, lb or ton = M (mass of resin or gel coat used, lb or ton) * EF (HAP monomer emission factor for resin or gel coat used, %);

EF, HAP monomer emission factor = emission factor expressed as pounds (lb) HAP emitted per ton of resin/gel coat processed, which is indicated by the HAP monomer content, method of application, and other emission reduction techniques for each gel coat and resin used.

(c) Non-atomized spray application technology shall be used to apply unfilled production resins. Non-atomized spray application technology includes flow coaters, flow choppers, pressure-fed rollers, or other non-spray applications of a design and specifications approved by IDEM, OAQ.

If it is not possible to apply a portion of unfilled resins with non-atomized spray application technology, equivalent emissions reductions must be obtained via the use of other emission reduction techniques. Examples of other emission reduction techniques include, but are not limited to, lower HAP monomer content resins and gel coats, closed molding, vapor suppression, vacuum bagging/bonding, controlled spray used in combination with automated actuators, or installing a control device.

(d) Optimized spray techniques according to a manner approved by IDEM, OAQ shall be used for gel coats and filled resins (where fillers are required for corrosion or fire retardant purposes) at all times. Optimized spray techniques include, but are not limited to, the use of airless, air-assisted airless, high volume low pressure (HVLP), or other spray applicators demonstrated to the satisfaction of IDEM, OAQ to be equivalent to the spray applicators listed above. First Significant Permit Revision: 039-16140-00556 Page 19 of 29

Modified by: ERG/YC MSOP 039-14254-00556

Noble Composites, Inc. Goshen, Indiana Permit Reviewer: ERG/KC

HVLP spray is the technology used to apply material to substrate by means of application equipment that operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (e) The listed work practices shall be followed:
 - (1) To the extent possible, a non-VOC, non-HAP solvent shall be used for cleanup.
 - (2) For VOC- and/or HAP-containing materials:
 - (A) Cleanup solvent containers shall be used to transport solvent from drums to work.
 - (B) Cleanup stations shall be closed containers having soft-gasketed, spring-loaded closures and shall be kept completely closed when not in use.
 - (C) Cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly.
 - (D) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.
 - (E) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
 - (3) All material storage containers shall be kept covered when not in use.
- (f) An operator training program shall be implemented as follows:
 - (1) All new personnel shall be trained within thirty (30) days of commencement of operation.
 - (2) All personnel shall be given a refresher training annually.
 - (3) The training shall include, at a minimum, all of the following topics:
 - (A) Appropriate application techniques.
 - (B) Appropriate equipment cleaning procedure.
 - (C) Appropriate equipment setup and adjustment to minimize material usage and overspray.
 - (4) The following training records shall be maintained on site and available for inspection and review:
 - (A) A copy of the current training program.
 - (B) A list of current personnel, by name, that are required to be trained, the dates they were trained, and the date of the most recent refresher training.

Noble Composites, Inc. First Significant Permit Revision: 039-16140-00556 Page 20 of 29 Goshen, Indiana Modified by: ERG/YC MSOP 039-14254-00556

Permit Reviewer: ERG/KC

D.1.2 Particulate [326 IAC 6-3-2(d)]

(a) Particulate from the gelcoat tunnels (EU1 and EU2) and the laminating tunnel (EU3) shall be controlled by dry particulate filters, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

- (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:
 - (1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (c) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this emissions unit and any control devices.

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.5 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs) [326 IAC 8-1-2][326 IAC 8-1-4]

Compliance with the monomer content and usage limitations contained in Conditions D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC and HAP data sheet. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.6 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the fiberglass panel manufacturing stacks while one or more of the tunnels are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response

First Significant Permit Revision: 039-16140-00556 Modified by: ERG/YC

Page 21 of 29 MSOP 039-14254-00556

Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.7 Visible Emissions Notations

- (a) Daily visible emission notations of the fiberglass facilities' stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.8 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the volatile organic HAP usage limits and/or the volatile organic HAP emission limits established in Condition D.1.1.
 - (1) The usage by weight and monomer content of each resin and gel coat. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used;
 - (2) A log of the dates of use;
 - (3) Method of application and other emission reduction techniques for each resin and gel coat used;
 - (4) The calculated total volatile organic HAP emissions from resin and gel coat use for each month.
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

First Significant Permit Revision: 039-16140-00556 Modified by: ERG/YC Page 22 of 29 MSOP 039-14254-00556

- (c) To document compliance with Condition D.1.7, the Permittee shall maintain records of the daily visible emission notations of the fiberglass operation's stack exhaust.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.1.9 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Page 23 of 29 MSOP 039-14254-00556

SECTION D.2

EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

- (c) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations;
- (d) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the trimmers and grinding and machining operations shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

The particulate matter control devices shall be in operation at all times that the trimmers, grinding, and machining equipment are operating in order to comply with this limit.

Page 24 of 29 MSOP 039-14254-00556

SECTION D.3

EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

- (e) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:
 - (1) Various building heaters;
- (f) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other airfiltration equipment;
- (g) Paved and unpaved roads and parking lots with public access; and
- (h) Sources emitting greater than one (1) pound per day but less than twelve and a half (12.5) pounds per day or two and a half (2.5) tons per year of any combination or HAPs:
 - (1) Two (2) six thousand (6000) gallon bulk tanks for storing liquid polyester resin.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

There are no specific regulations applicable to these units.

First Significant Permit Revision: 039-16140-00556 Modified by: ERG/YC

Noble Composites, Inc. Goshen, Indiana Permit Reviewer: ERG/KC

Company Name:

Page 25 of 29 MSOP 039-14254-00556

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY Compliance Branch

MINOR SOURCE OPERATING PERMIT ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Noble Composites, Inc.

| Address: | 2424 East Kercher Road, Goshen, Indiana 46526 | |
|---|---|--|
| City: | Goshen, Indiana | |
| Phone #: | (574) 534-0010 | |
| MSOP #: | 039-14254-00556 | |
| I hereby certify that Nob | le Composites, Inc. is | 9 still in operation.9 no longer in operation. |
| I hereby certify that Nob | le Composites, is | 9 in compliance with the requirements of MSOP 039-14254-005569 not in compliance with the requirements of MSOP 039-14254-00556. |
| Authorized Individua | l (typed): | |
| Title: | | |
| Signature: | | |
| Date: | | |
| If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved. | | |
| Noncompliance: | | |
| | | |
| | | |
| | | |
| | | |

First Significant Permit Revision: 039-16140-00556 Modified by: ERG/YC

Noble Composites, Inc. Goshen, Indiana Permit Reviewer: ERG/KC Page 26 of 29 MSOP 039-14254-00556

MALFUNCTION REPORT INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY FAX NUMBER - 317 233-5967

First Significant Permit Revision: 039-16140-00556 Modified by: ERG/YC

Page 27 of 29 MSOP 039-14254-00556

*SEE PAGE 2 PAGE 1 OF 2

First Significant Permit Revision: 039-16140-00556 Modified by: ERG/YC

Page 28 of 29 MSOP 039-14254-00556

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

*Essential services are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

First Significant Permit Revision: 039-16140-00556 Modified by: ERG/YC Page 29 of 29 MSOP 039-14254-00556

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

MSOP Quarterly Report

| Source Name: No | oble Composites, Inc. |
|-----------------|-----------------------|
|-----------------|-----------------------|

Source Address: 2424 East Kercher Road, Goshen, Indiana 46526 Mailing Address: 2424 East Kercher Road, Goshen, Indiana 46526

MSOP No.: M039-14254-00556

Phone:

Facility: Fiberglass panel manufacturing units

Parameter: VOC/HAP emissions from the use of resins and gel coats

Limit: 245 tons per twelve (12) consecutive month period with compliance determined at the

end of each month

| YEAR: | |
|-------|--|
| YEAR: | |

| | Column 1 | Column 2 | Column 1 + Column 2 |
|---------|------------|--------------------|---------------------|
| Month | This Month | Previous 11 Months | 12 Month Total |
| Month 1 | | | |
| | | | |
| Month 2 | | | |
| | | | |
| Month 3 | | | |
| | | | |
| | | | |

| 9 | | n/s occurre n has beer | | | |
|--|----------|---------------------------|--|--|--|
| Submitt Title / P Signatu Date: | osition: | | | | |

No deviation occurred in this quarter.

Attach a signed certification to complete this report.

March 28, 2003

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Minor Source Operating Permit (MSOP) Revision

Source Background and Description

Source Name: Noble Composites, Inc.

Source Location: 2424 East Kercher Road, Goshen, Indiana 46526

County: Elkhart SIC Code: 3083

MSOP No.: 039-14254-00556

MSOP Issuance Date: August 9, 2001

Operation Permit No.: T039-16024-00556

Operation Permit Issuance Date: Pending

Significant Permit Revision: 039-16140-00556

Permit Reviewer: ERG/YC

The Office of Air Quality (OAQ) has reviewed an application from Noble Composites, Inc. relating to an increase in the VOC and HAP emission limits for the existing fiberglass panel manufacturing operations.

History

On September 23, 2002, Noble Composites, Inc. submitted an application to the OAQ requesting to increase the VOC and HAPs emission limits for the use of resins and gel coats in the following existing units:

- (a) Two (2) gel coat tunnels, identified as EU 1 and EU 2, constructed in 2001, each with a maximum of 4.5 molds per hour, both equipped with dry filters for particulate control and exhausting to stack EFG 1;
- (b) One (1) laminating tunnel, identified as EU 3, constructed in 2001, with a maximum of 4.5 molds per hour, equipped with dry filters for particulate control and exhausting to stack EFL 2;

The VOC/HAP emissions from the use of resins and gel coats from these units were limited to less than 100 tons per twelve (12) consecutive month period in the source's construction permit (MSOP #039-14254-00556, issued on August 9, 2001), pursuant to 326 IAC 8-1-6 (BACT) and 326 IAC 2-4.1-1 (MACT). The Permittee requested to revise these VOC/HAP emission limits from 100 to 245 tons per twelve (12) consecutive month period due to the increase of production demand. There will be no physical change required for the existing fiberglass panel manufacturing line to accomplish the proposed change in VOC emission limit.

Noble Composites, Inc Page 2 of 13 Goshen, Indiana SPR: 039-16140-00556

Permit Reviewer: ERG/YC

In addition, the source stated that the maximum throughput rate for each tunnel is 7.5 molds per hour. The throughput rate of 4.5 molds/hr in the construction permit application was an estimate for this fiberglass panel manufacturing line. The change in the maximum throughput rate increases the potential to emit VOC/HAPs from this source to greater than 250 tons/yr before control. The source stated that the actual VOC/HAP emissions from this source have never exceeded the current emission limit of 100 tons/yr.

Combined with the VOC emissions from the insignificant activities, the VOC emissions from the entire source are still less than 250 tons/yr after this permit revision. Therefore, the source will maintain a PSD minor source status. The source submitted their Part 70 Permit application on August 28, 2002. However, the Part 70 permit (#039-16024-00556) is currently being reviewed and has not been issued yet.

Existing Approvals

The permittee was issued a MSOP (# 039-14254-00556) on August 9, 2001 to construct a new source. No other air approvals have been issued since the issuance of the MSOP.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Significant Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on August 28, 2002. Additional information was submitted on December 11, 2002, January 13, 2003, and January 21, 2003.

Emission Calculations

There is no new unit addressed in this revision.

Potential To Emit of Revision

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

| Pollutant | Potential To Emit (tons/year) |
|-----------------|-------------------------------|
| PM | |
| PM-10 | |
| SO ₂ | |
| VOC | 245.0 |
| СО | |
| NO _x | |
| Total HAPs | 245.0 |

Noble Composites, Inc Page 3 of 13
Goshen, Indiana SPR: 039-16140-00556

Permit Reviewer: ERG/YC

The comparison between the revised and the previous PTE for the use of resins and gel coats in the existing fiberglass panel manufacturing operation:

| | Potential to Emit for the Use of Resins and Gel Coats (tons/year) | |
|------------|---|--|
| Pollutants | The PTE in MSOP #039- 14254-00556, issued August 9, 2001 | The proposed PTE in this permit revision |
| VOC | 100 | 245 |
| Total HAPs | 100 | 245 |

Justification for Revision

This revision is being performed through a MSOP Significant Permit Revision pursuant to 326 IAC 2-6.1-6(i)(1)(E) as the potential to emit VOC is greater than 25 tons per year, and pursuant to 326 IAC 2-6.1-6(i)(1)(G) as the potential to emit HAPs is greater than 10 tons per year for a single HAP and greater than 25 tons per year for any combination of HAPs.

County Attainment Status

The source is located in Elkhart County.

| Pollutant | Status |
|-----------------|------------------------|
| PM-10 | Attainment |
| SO ₂ | Attainment |
| NO ₂ | Attainment |
| Ozone | Maintenance Attainment |
| CO | Attainment |
| Lead | Attainment |

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as maintenance attainment. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Elkhart County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source
 Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Noble Composites, Inc Page 4 of 13 Goshen, Indiana SPR: 039-16140-00556

Permit Reviewer: ERG/YC

| Pollutant | Emissions | | |
|-----------|---------------|--|--|
| | (ton/yr) | | |
| PM | 17.7 | | |
| PM10 | 17.7 | | |
| SO_2 | 0 | | |
| VOC | Less than 100 | | |
| CO | 0 | | |
| NO. | 0 | | |

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on the potential to emit in the TSD of the source's MSOP #039-14254-00556, issued August 9, 2001.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this MSOP significant permit revision.

| | Potential to Emit (tons/year) | | | | | | | |
|---|----------------------------------|-------------------|-----------------|---|------------|-----------------|---|--|
| Process/facility | PM | PM-10 | SO ₂ | VOC | СО | NO _X | HAPs | |
| Resin and Gel Coat Usage in EU1, EU2, and EU3 | 17.7 | 17.7 | 1 | Less than 100 245 | -1 | -1 | Less than 100 245 | |
| Insignificant Activities | Less than 5.0 | Less than 5.0 | Negligible | Less than 5.0 | Negligible | Negligible | Negligible | |
| Total Emissions of the Entire Source After Revision | Less than 22.7 | Less than 22.7 | | Less than 250 | | | Less than 250 | |
| PSD Thresholds | 250 | 250 | 250 | 250 | 250 | 250 | NA | |

This modification to an existing minor stationary source is not major because the source is maintaining their PSD minor source status. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) at least one of the criteria pollutant is greater than or equal to 100 tons per year,

Noble Composites, Inc Page 5 of 13
Goshen, Indiana SPR: 039-16140-00556

Permit Reviewer: ERG/YC

(b) a single hazardous air pollutant (HAP) is greater than or equal to 10 tons per year, or

(c) any combination of HAPs is greater than or equal to 25 tons/year.

This existing source has submitted their Part 70 (T039-16024-00556) application on August 28, 2002. However, the Part 70 permit has not been issued yet. This permit revision will be incorporated in the pending Part 70 permit.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) The source does not have any spin wool fiberglass insulation manufacturing line. Therefore, the New Source Performance Standards for Wool Fiberglass Insulation Manufacturing Plants (40 CFR Part 60.680 60.685, Subpart PPP) are not applicable.
- (c) This source does not apply the surface coating to any business machines. Therefore, the New Source Performance Standards for Surface Coating of Plastic Parts for Business Machines (40 CFR Part 60.720 60.726, Subpart TTT) are not applicable.
- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.
- (e) The source manufactures products with thermoset resins and gel coats. Therefore, the proposed National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Reinforced Plastic Composites Production Facilities (40 CFR Part 63, Subpart WWWW) may be applicable to this source. However, these standards were proposed on August 2, 2001 and have not been promulgated as of the issuance of this Significant Permit Revision. Once this rule is promulgated by U.S. EPA, the Permittee shall submit a permit modification application to include the requirements of 40 CFR 63, Subpart WWWW into the pending Part 70 Permit.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source was constructed in 2001 and modified in 2003 (this permit revision). This source is not in 1 of 28 source categories and the unlimited potential to emit VOC before control is greater than 250 tons/yr. The potential to emit of VOC from the entire source was limited to less than 100 tons/yr when it was constructed in 2001. After this permit revision, the potential to emit VOC from the entire source will be limited to less than 250 tons per year. Therefore, this source is not a PSD major source and the requirements of 326 IAC 2-2 are not applicable to this source.

326 IAC 2-4.1 (New Source Toxics Control)

This source was constructed after to July 27, 1997 and HAP emissions from the entire source is greater than 10 tons per year for a single HAP and greater than 25 tons per year for any combination of HAPs. Therefore, the requirements of 326 IAC 2-4.1 (MACT) are applicable to the source.

The source specific MACT standards for the fiberglass panel manufacturing operation have been determined in MSOP #039-14254-00556, issued August 9, 2001. The MACT determined in MSOP #039-14254-00556 for the fiberglass panel manufacturing operation at this source included: (1) limiting the total HAPs emissions from the use of resins and gel coats to less than 100 tons/yr; (2)

Noble Composites, Inc Page 6 of 13
Goshen, Indiana SPR: 039-16140-00556

Permit Reviewer: ERG/YC

HAP content limits for gel coat and resin used; (3) type of the spray application technology; (4) work practices; and (5) operator training program.

The source has requested to increase the total HAP emission limit to 245 tons/yr, lower the HAP content limit of production gel coat to less than 36%, and retain the other requirements of the current MACT. IDEM, OAQ has determined that these requirements are the BACT (Best Available Control Technology) for this fiberglass panel manufacturing line (see Appendix A), and these requirements also satisfy the requirements of 326 IAC 2-4.1. Therefore, the total HAP emission limit for the use of resins and gel coats in the existing fiberglass panel manufacturing operation will be revised to 245 tons/yr in this permit revision.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC and the source is located in Elkhart County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Gel Coat Tunnels (EU1 and EU2) and Laminating Tunnel (EU3)

326 IAC 8-1-6 (General Reduction Requirements for VOC Emissions)

The gel coat tunnels (EU1 and EU2) and the laminating tunnel (EU3) of the fiberglass panel manufacturing line were constructed after January 1, 1980. The increase of VOC emission limit from 100 tons/yr to 245 tons/yr for the use of resins and gel coats will increase the VOC emissions from these operations. The potential to emit VOC from each of these operations (EU1, EU2, and EU3) is greater than 25 tons/yr and there are no other applicable 326 IAC 8 rules that apply to these operations. Therefore, the requirements of 326 IAC 8-1-6 (Best Available Control Technology) are applicable to these operations.

Noble Composites, Inc. submitted a Best Available Control Technology (BACT) Analysis on December 11, 2002. Additional information was received on January 13, 2003 and January 21, 2003. A summary of the BACT analysis is provided in Appendix A. IDEM, OAQ has reviewed the analysis and has agreed that the following limitations proposed by Noble Composites, Inc. represent BACT for the gel coat tunnels (EU1 and EU2) and the laminating tunnel (EU3):

- (a) The VOC/HAP emission limits from the use of resins and gelcoats shall not exceed 245 tons per twelve (12) consecutive month period.
- (b) The HAP monomer contents of resins and tooling gel coat shall not exceed the VOC/HAP content limits established in MSOP #039-14254-00556, issued on August 9, 2001.

Noble Composites, Inc Page 7 of 13
Goshen, Indiana SPR: 039-16140-00556

Permit Reviewer: ERG/YC

(c) The HAP monomer content of the production gel coat used shall not exceed 36% by weight.

- (d) The optimized spray application technology defined in MSOP #039-14254-00556, issued on August 9, 2001.
- (e) The work practice and the operator training program defined in MSOP #039-14254-00556, issued on August 9, 2001.

326 IAC 20-25 (Reinforced Plastics Composites Fabricating Emission Units)

This source manufactures reinforced plastics composites parts and has the potential to emit 10 tons/yr of any single HAP and 25 tons/yr of total HAPs. Therefore, this source is subject to the requirements of 326 IAC 20-25.

However, the BACT determined in this revision is the more stringent requirement for the fiberglass panel manufacturing operation at this source. Pursuant to 326 IAC 20-25-1(b), the more stringent requirement (BACT) shall apply to this operation.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2(d), particulate from the gel coat tunnels (EU1 and EU2) and the laminating tunnel (EU3) shall be controlled by dry particulate filters, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

Proposed Changes

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary fiberglass and wood reinforced plastic flat panel manufacturing plant.

Authorized Individual: Larry Farver, President

Source Address: 2424 East Kercher Road, Goshen, Indiana 46526

Mailing Address: 66231 County Road 212424 East Kercher Road, Goshen, Indiana 46526

Phone Number: (219)533-1032 (574) 534-0010

SIC Code: 3089 3083
County Location: Elkhart

County Status: Attainment for all criteria pollutants
Source Status: Minor Source Operating Permit

Minor Source, under PSD or Emission Offset Rules; Major Source, Section 112 of the Clean Air Act Noble Composites, Inc Page 8 of 13
Goshen, Indiana SPR: 039-16140-00556

Permit Reviewer: ERG/YC

Not 1 of 28 Source Categories

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) Two (2) gel coat tunnels, identified as EU 1 and EU 2, to be constructed in 2001, each with a maximum of **7.5**4.5 molds per hour, both equipped with dry filters for particulate control and exhausting to stack EFG 1;
- (b) One (1) laminating tunnel, identified as EU 3, to be constructed in 2001, with a maximum of **7.54.5** molds per hour, equipped with dry filters for particulate control and exhausting to stack EFL 2;

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

- (a) Two (2) gel coat tunnels, identified as EU 1 and EU 2, to be constructed in 2001, each with a maximum of **7.54**.5 molds per hour, both equipped with dry filters for particulate control and exhausting to stack EFG 1;
- (b) One (1) laminating tunnel, identified as EU 3, to be constructed in 2001, with a maximum of **7.54**.5 molds per hour, equipped with dry filters for particulate control and exhausting to stack EFL 2;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 New Source Toxics Control [326 IAC 2-4.1-1] and VOC [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, **MSOP #039-14254-00556**, **issued on August 9, 2001**, **and modified in this permit revision**, the new fiberglass panel manufacturing operation is subject to the requirements of 326 IAC 8-1-6 because the potential emissions are greater than twenty-five (25) tons per year and there are no other applicable Article 8 rules that apply. This rule requires that the Best Available Control Technology (BACT) be used to control VOC emissions. BACT for this new source shall be satisfied by the MACT determination of 326 IAC 2-4.1 (New Source Toxics Control).

- (a) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit volatile organic HAP from use of such resins and gel coats only shall be less than two hundred forty five (245) one hundred (100) tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit shall be determined based upon the following criteria:
 - (2) The emission factors approved for use by IDEM, OAQ shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, April 1999 July 2001. For HAP-emitting operations not addressed by this reference, emission factors shall be taken from U.S. EPA's AP-42 document. For the purpose of these emission calculations, HAP monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.

Noble Composites, Inc Page 9 of 13 Goshen, Indiana SPR: 039-16140-00556

Permit Reviewer: ERG/YC

| Type of Gel Coat or Resin | HAP Monomer Content, % by weight | |
|----------------------------------|----------------------------------|--|
| Production ¹ Gel Coat | 36 37 | |
| Tooling Gel Coat | 45 | |
| Production Resin | 35 | |
| Tooling Resin | 43 | |

¹ Production refers to the manufacture of parts

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(ed)]

Pursuant to 326 IAC 6-3-2, the PM from the fiberglass panel manufacturing operation shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

E = 4.10 P^{0.67} where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

- (a) Particulate from the gelcoat tunnels (EU1 and EU2) and the laminating tunnel (EU3) shall be controlled by dry particulate filters, and the Permittee shall operate the control device in accordance with manufacturer's specifications.
- (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:
 - (1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (c) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

D.1.5 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs) [326 IAC 8-1-2][326 IAC 8-1-4]

Compliance with the monomer content and usage limitations contained in Conditions D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC and HAP data sheet. using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.6 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the fiberglass panel manufacturing units are in operation.

Noble Composites, Inc Page 10 of 13 Goshen, Indiana SPR: 039-16140-00556

Permit Reviewer: ERG/YC

D.1.76 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the fiberglass panel manufacturing stacks while one or more of the tunnels are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.87 Visible Emissions Notations

- (a) Daily visible emission notations of the fiberglass facilities' stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.98 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the volatile organic HAP usage limits and/or the volatile organic HAP emission limits established in Condition D.1.1.
 - (1) The usage by weight and monomer content of each resin and gel coat. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used;
 - (2) A log of the dates of use;

Noble Composites, Inc Page 11 of 13
Goshen, Indiana SPR: 039-16140-00556

Permit Reviewer: ERG/YC

(3) Method of application and other emission reduction techniques for each resin and gel coat used;

- (4) The calculated total volatile organic HAP emissions from resin and gel coat use for each month.
- (b) To document compliance with Condition D.1.76, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) To document compliance with Condition D.1.87, the Permittee shall maintain records of the daily visible emission notations of the fiberglass operation's stack exhaust.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.1.109 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY Compliance Branch

MINOR SOURCE OPERATING PERMIT ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

| Company Name: | Noble Composites, Inc. |
|---------------|---|
| Address: | 2424 East Kercher Road, Goshen, Indiana 46526 |
| City: | Goshen, Indiana |
| Phone #: | (574) 534-0010 |
| MSOP #: | 039-14254-00556 |

I hereby certify that Noble Composites, Inc. is 9 still in operation.

9 no longer in operation.

I hereby certify that Noble Composites, is 9 in compliance with the requirements of

MSOP 039-14254-00556

9 not in compliance with the requirements of

MSOP 039-14254-00556.

Noble Composites, Inc Goshen, Indiana Permit Reviewer: ERG/YC

| Authorized Individual (typed): |
|--|
| Title: |
| Signature: |
| Date: |
| f there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved. |
| Noncompliance: |
| |

Page 12 of 13

SPR: 039-16140-00556

Noble Composites, Inc Page 13 of 13 Goshen, Indiana SPR: 039-16140-00556

Permit Reviewer: ERG/YC

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

MSOP Quarterly Report

Source Name: Noble Composites, Inc.

Source Address: 2424 East Kercher Road, Goshen, Indiana 48526 46526

Mailing Address: 66231 County Road, 2424 East Kercher Road, Goshen, Indiana 46526

MSOP No.: M039-14254-00556

Facility: Fiberglass panel manufacturing units

Parameter: VOC/HAP Emissions from the use of resins and gel coats

Limit: 100 245 tons per twelve (12) consecutive month period with compliance determined

at the end of each month

Conclusion

This permit revision shall be subject to the conditions of the attached proposed MSOP Significant Permit Revision No. 039-16140-00556.

Appendix A March 28, 2003

BEST AVAILABLE CONTROL TECHNOLOGY (BACT) DETERMINATION

Source Background and Description

Source Name: Noble Composites, Inc.

Source Location: 2424 East Kercher Road, Goshen, Indiana 46526

County: Elkhart SIC Code: 3083

Construction Permit No.: MSOP #039-14524-00556 Construction Permit Issuance Date: August 9, 2001 Significant Permit Revision No.: 039-16140-00556

Permit Reviewer: ERG/YC

The Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) has performed the following Best Available Control Technology (BACT) review for a significant permit revision to an existing fiberglass and wood reinforced plastic flat panel manufacturing plant, owned and operated by Noble Composites, Inc., located in 2424 East Kercher Road, Goshen, Indiana 46526. This revision is related to an emission limits increase for the following emission units:

- (a) Two (2) gel coat tunnels, identified as EU 1 and EU 2, constructed in 2001, each with a maximum of 7.5 molds per hour, both equipped with dry filters for particulate control and exhausting to stack EFG 1.
- (b) One (1) laminating tunnel, identified as EU 3, constructed in 2001, with a maximum of 7.5 molds per hour, equipped with dry filters for particulate control and exhausting to stack EFL 2;

These units were permitted to construct in MSOP #039–14524-00556, issued on August 9, 2001. The VOC and HAP emissions from these units were limited to less than 100 tons per twelve (12) consecutive month period pursuant to 326 IAC 8-1-6 (BACT) and 326 IAC 2-4.1-1 (MACT). On September 23, 2002, Noble Composites, Inc. submitted an application to the OAQ requesting to increase the VOC and HAP emission limits for these units from 100 tons/yr to 245 tons/yr because the source would like to increase their production rate. No physical change is required for these units as a result of this modification. The VOC emission increase from this revision is greater than 25 tons/yr, and these operations are not regulated by other provisions of 326 IAC 8. Therefore, these emission units are subject to 326 IAC 8-1-6 and are required to control the emissions using BACT.

IDEM, OAQ conducts BACT analyses in accordance with the "Top-Down" Best Available Control Technology Guidance Document outlined in the 1990 draft USEPA New Source Review Workshop Manual, which outlines the steps for conducting a top-down BACT analysis. Those steps are listed below:

- (a) Identify all potentially available control options;
- (b) Eliminate technically infeasible control options;
- (c) Rank remaining control technologies by control effectiveness;
- (d) Evaluate the most effective controls and document the results; and

(e) Select BACT.

Also, in accordance with the "Top-Down" Best Available Control Technology Guidance Document outlined in the 1990 draft U.S EPA New Source Review Workshop Manual, BACT analyses take into account the energy, environmental, and economic impacts on the source. These reductions may be determined through the application of available control techniques, process design, and/or operational limitations. Such reductions are necessary to demonstrate that the emissions remaining after application of BACT will not cause or contribute to air pollution thereby protecting public health and the environment.

The following BACT determinations are based on the following information:

- (a) The BACT analysis submitted by Noble Composites, Inc. on December 11, 2002;
- (b) Information from vendors/suppliers;
- (c) The EPA RACT/BACT/LAER (RBLC) Clearinghouse; and
- (d) State, and Local air quality permits.

VOC BACT

The source incorporates unsaturated polyester resin, gel coat, fiberglass roving, and wood panels to produce sidewalls used in the construction of Class A motor homes. Most of the VOCs from these units are emitted by spraying gel coat onto open molds. The panels range in size from 8 to 10 feet wide by 40 to 50 feet long (320 to 500 square feet in area). The primary emissions from these operations are Styrene, which is also considered a HAP. The source stated that the fiberglass manufacturing operation at this source is similar to boat manufacturing process due to the size of products.

Step 1 - Identify Control Options

The following available technologies were identified and evaluated to control VOC emissions from the fiberglass operations:

(a) IDEM, OAQ and the source searched EPA's RACT/BACT/LAER Clearinghouse (RBLC) and IDEM Northern Regional Office Air Permits to identify sources with emissions similar to this source. The search identified the following:

| <u>Company</u> | <u>PBLD ID</u> | Date Issued and State | Type of Operation | BACT Requirements | Emission Limits |
|--------------------------|----------------|--------------------------|-----------------------|---|--------------------|
| Stingray Boat Company | SC-0067 | 06/20/00 (SC) | Boat manufacturing | HAP content limits: Pigmented gel coat < 33% Non-atomized gel coat <35% Clear gel coat < 48% Atom tooling resin < 30% Non-Atom tooling resin < 39% Tooling gel coat < 40% | 249 tons/yr |

Permit Reviewer: ERG/YC

| <u>Company</u> | PBLD ID | Date Issued and State | Type of Operation | BACT Requirements | Emission Limits |
|--------------------------------------|--|-----------------------|--|---|--------------------|
| Beneteau USA, Inc. | SC-0068 | 04/19/00 (SC) | Boat manufacturing | HAP content limits: Pigmented gel coat < 33% Non-atomized gel coat <35% Clear gel coat < 48% Atom tooling resin < 30% Non-Atom tooling resin < 39% Tooling gel coat < 40% | 249 tons/yr |
| Fiber Pro, Inc. | MI-0251 | 03/24/00 (MI) | Fiberglass panel manufacturing | Controlled spray techniques, Barrier film covered cure HAP<25% for Gel coat HAP<38% for Resin | 44.9 tons/yr |
| Praxis Industries | TN-0101 | 03/01/00 (TN) | Fiberglass bathroom fixtures manufacturing | Low VOC content coatings, Fluid impingement technology application guns | 486 tons/yr |
| Aqua Glass West, Inc. | OR-0023 | 05/27/97(OR) | Bathtub, spa and shower stall manufacturing | A thermal oxidizer with 85% control is required when VOC > 166 ton/yr | 166 tons/yr |
| Sanger Boats, Inc. | CA-0694 | 03/21/96 (CA) | Boat manufacturing | Low VOC/HAP (<35% weight) Resin, Airless spray gun and hand layup combination | 29 lbs/day |
| Fabwel Composites (Owens Corning) | Indiana's Permit: CP039- 4937 | 03/21/96 (IN) | Flat panel manufacturing line | Airless resin application, Air-assisted airless gel coat application | 90.2 tons/yr |

- (b) Noble Composites, Inc. also evaluated a variety of control technologies, including the following:
 - (1) Regenerative Thermal Oxidation;
 - (2) Catalytic Oxidation;
 - (3) Carbon Adsorption;
 - (4) Zeolite Concentrator;
 - (5) Condensation;
 - (6) Biofiltration;
 - (7) Low VOC/HAP Resin (currently used);

- (8) Low VOC/HAP Gel coat;
- (9) High Transfer Efficiency Resin Application or Combination of Controlled Spray/Covered Cure (currently used);
- (10) Non-Atomizing Gel coat Application; and
- (11) Vapor Suppressed Resins.

Step 2 - Eliminate technically infeasible control options

Based on the results from the RBLC database search, vendor review, and an evaluation of the control technologies, IDEM has determined that the use of carbon adsorption, zeolite concentrator, condensation, biofiltration, non-atomizing gel coat application, and vapor suppressed resins are not technically feasible options for this source for the following reasons:

- (a) The use of carbon adsorption and zeolite concentrator is infeasible because the monomer will block the carbon and zeolite beds.
- (b) The condensation method is infeasible due to the low VOC concentration in the waste stream.
- (c) The technology of biofiltration systems is still under development for styrene emission controls.
- (d) Non-atomizing gel coat application is infeasible for Noble Composites, Inc. because of product appearance standards. Noble Composites, Inc. has performed trials of FIT application equipment and lower VOC/HAP gel coats at this site and the products were unacceptable to Noble's customers.
- (e) Vapor suppressed resins is infeasible for Noble Composites, Inc. because vapor suppressed resins contain paraffin materials that will prevent bonding of the laminate to the wood panel substrate.

Step 3 - Rank remaining control technologies by control effectiveness

The remaining technically feasible approaches for controlling VOC emissions from facilities that have a VOC PTE comparable in magnitude to the fiberglass and wood panel manufacturing operation at this source are:

| Options for VOC Control | Overall VOC control Efficiency | |
|---|--------------------------------------|--|
| Regenerative Thermal Oxidizer | 85%* | |
| Catalytic Oxidizer | 85%* | |
| **Low VOC/HAP Resin and Gelcoat with High Efficiency Applications | 2.4% | |

Note: (*) The overall control efficiency includes a 90% capture efficiency and a 95% destruction efficiency.

(**) Low VOC/HAP resin and high efficiency applications are currently used at this source.

Step 4 - Evaluate the most effective controls and document results

Noble Composites provided IDEM with a thorough economic analysis of the technically feasible control options. The analysis estimated the cost of the VOC control equipment, including the initial capital cost of the various components intrinsic to the complete system, and the estimated annual operating costs. The estimated total capital cost was calculated with the use of a factoring method of determining direct and indirect installation costs. The basic equipment costs were obtained from vendor's quoted prices. Annualized costs were developed based on information from the vendors and a literature review. The analysis assumed an interest rate of 5% and an equipment life of 10 years. The basis of cost effectiveness, used to evaluate the control options, is the ratio of the annualized cost to the amount of VOC (tons) removed per year. Note that the cost effectiveness of each option only accounts for the portion of VOC removed by the add-on controls. There are relatively negligible costs associated with the low VOC/HAP gel coat. A summary of the cost figures determined in the analysis is provided in the table below:

| Option | Capital Cost (\$) | Total Operating Cost (\$/yr) | Total Annualized Costs (\$/yr) | Potential VOC removal (ton/yr) | Cost Effectiveness (\$/ton VOC removed) |
|---|----------------------|------------------------------------|---|--------------------------------------|--|
| Regenerative Thermal Oxidizer (95% overall reduction) | \$1,258, 987 | \$587,303 | \$919,423 | 208.3 | \$4,414 |
| Catalytic Oxidizer (95% overall reduction) | \$1,530,712 | \$563,851 | \$967,653 | 208.3 | \$4,645 |
| Low VOC (<36%) Production Gel Coat | NA | NA | NA | 5.88 | \$0 |

Note: A complete breakdown of the costs associated with the thermal and catalytic oxidizers is included in Appendix B.

Step 5 - Select BACT

IDEM has determined that BACT for Noble Composites, Inc. will be the utilization of low VOC/HAP (<36%) production gel coat with a VOC usage limit and good work practice standards. This determination is based on the following reasons:

- (a) This source currently employ 59 people and is classified as a small business as defined in 13 CFR 121.201. Pursuant to the proposed MACT standards for Reinforced Plastics (40 CFR 63, Subpart WWW), an existing facility that is a small business and emits less than 250 tons/yr of HAPs is required to meet the annual average HAP emission limits and the work practice standards. No add-on control for HAP emissions are required for this type of source in this proposed MACT standard.
- (b) The part size of the products ranges from 320 to 500 square feet and is closer to part sizes found in boat manufacturing processes. Because of the size and weight of the parts and the molds, molds must be moved by a chain driven conveyor. It is difficult for the source to enclose the coating and laminating processes and collect the emissions with 90% capture efficiency, which was used for the cost effectiveness analysis.

(c) None of the boat manufacturing facilities listed in RBLC database is required to put on addon controls due to the difficulties in enclosing the manufacturing line and to provide the constant pollutants concentration in the waste stream needed to support combustion.

Specifically, the Permittee shall comply with the following:

- (a) The VOC/HAP emissions from the use of resins and gel coats shall not exceed 245 tons per twelve (12) consecutive month period.
- (b) The HAP monomer contents of resins and tooling gel coat shall not exceed the VOC/HAP content limits established in MSOP #039-14254-00556, issued on August 9, 2001.
- (c) The HAP monomer content of the production gel coat used shall not exceed 36% by weight.
- (d) The optimized spray application technology defined in MSOP #039-14254-00556, issued on August 9, 2001.
- (e) The work practice and the operator training program defined in MSOP #039-14254-00556, issued on August 9, 2001.

Appendix B March 28, 2003

COST ANALYSIS FOR THERMAL AND CATALYTIC OXIDIZERS

| VENDOR | ALLIANCE CORP | ENVIROCURE |
|--|-----------------------------------|--------------------------------|
| CAPITAL COSTS | Regenerative Thermal Oxidation | Catalytic Thermal Oxidation |
| 1. Purchased Equipment | | |
| a. Basic Equipment & Auxiliaries (A) | \$466,339.00 | \$726,500.00 |
| b. Instrumentation & Controls (0.1A) | \$ | \$ - |
| c. Taxes (0.06A) | \$27,980.34 | \$43,590.00 |
| d. Freight (0.05A) | \$23,316.95 | \$36,325.00 |
| Total Purchased Equipment Cost (B) | <u>\$517,636.29</u> | <u>\$806,415.00</u> |
| 2. Direct Installation Costs | | |
| a. Foundations & Supports (0.08 B) | \$41,410.90 | \$64,513.20 |
| b. Erection & Handling (0.14 B) | \$72,469.08 | \$112,898.10 |
| c. Electrical (0.04 B) | \$20,705.45 | \$32,256.60 |
| d. Piping (0.02 B) | \$10,352.73 | \$16,128.30 |
| e. Insulation (0.01 B) | \$5,176.36 | \$8,064.15 |
| f. Painting (0.01 B) | \$ | \$ |
| g. Site Preparation (As Required) | \$ | \$ |
| h. Building/Process | \$200,000.00 | \$50,000.00 |
| Stack Dampering & Fire Protection | \$50,000.00 | \$50,000.00 |
| Ducting Not Included in Proposal | \$75,000.00 | \$ |
| Capture Enclosure Not Included in Proposal | \$75,000.00 | \$ |
| Total Direct Installation Costs | <u>\$350,114.52</u> | <u>\$283,860.35</u> |
| <u>Total Direct Costs (TDC) (Purchased + Installation)</u> | <u>\$867,750.81</u> | <u>\$1,090,275.35</u> |
| Indirect Costs | | |
| 3 Engineering & Supervision (0.05 B) | \$25,881.81 | \$ |
| 4 Loss of Production Cost (1 Week) | \$230,769.23 | \$230,769.23 |
| 5 Construction & Field Expenses (0.10 B) | \$51,763.63 | \$80,641.50 |
| 6 Contractor Fees (0.10 B) | \$51,763.63 | \$80,641.50 |
| 7 Start Up Costs (0.02 B) | \$10,352.73 | \$16,128.30 |
| 8 Performance Test (0.01 B) | \$ 5,176.36 | \$8,064.15 |
| 9 Contingency (0.03 B) | \$15,529.09 | \$24,192.45 |
| Total Indirect Costs | <u>\$391,236.48</u> | <u>\$440,437.13</u> |
| Total Installed Capital Cost | <u>\$1,258,987.29</u> | <u>\$1,530,712.48</u> |

ANNUALIZED COSTS

Direct Operating Costs

| 1. Operating Labor | \$124,800.00 | \$124,800.00 |
|--|------------------------|---------------------|
| a. Number of Employees | 1 | 1 |
| b. Cost/Employee/Hour w/Benefits | \$20.00 | \$20.00 |
| c. Operating Hours/Year | \$6,240.00 | \$6,240.00 |
| 2. Supervisory Labor (0.15 1) | \$18,720.00 | \$18,720.00 |
| 3. Maintenance Labor & Materials (5% of TDC) | \$43,387.54 | \$54,513.77 |
| 4. Replacement Parts (5% of Basic Capital Costs) | \$25,881.81 | \$40,320.75 |
| 5. Utilities | | |
| a. Natural Gas | \$179,275.20 | \$83,900.79 |
| MMBTU/HR Input | 5.00 | 2.34 |
| Operating Hours/Year | 6,240 | 6,240 |
| Cost/MMBTU - Provided by Facility | \$5.7460 | \$5.7460 |
| MMBTU/YR | 31,200 | 14,602 |
| b. Electricity | \$50,703.19 | \$18,784.65 |
| HP Requirements | 128.67 | 47.67 |
| KW Requirements/Hr | 96.50 | 35.75 |
| KWH/YR | 602,176 | 223,096 |
| Cost/KWH - Provided by Facility | \$0.0842 | \$0.0842 |
| c. Water | \$ | \$ |
| d. Air | \$ - | \$ |
| e. Catalyst Replacement (20% Basic Capital Cost/5 Years) | \$ | \$29,060.00 |
| Total Direct Operating Costs | \$442,767.7 <u>4</u> | <u>\$370,099.96</u> |
| Indirect Operating Costs | | |
| 6. Overhead (80% of Oper. Labor & Maintenance) | \$149,526.03 | \$158,427.01 |
| 7. Property Tax (0.01 Capital Cost) | \$12,589.87 | \$15,307.12 |
| 8. Insurance (0.01 Capital Cost) | \$12,589.87 | \$15,307.12 |
| 9. Administrative Costs (0.02 Capital Cost) | \$25,179.75 | \$30,614.25 |
| Subtotal - Indirect Operating Costs | <u>\$199,885.52</u> | <u>\$219,655.51</u> |
| 10. Capital Cost Recovery Factor (5% INT, 10 Years) = 0.2638 | \$332,120.85 | \$403,801.95 |
| Total Indirect Operating Costs | \$532,006.37 | <u>\$623,457.47</u> |
| Heat Recovery Credit | \$ (55, 351.22) | \$ (25, 904.37) |
| a. Heat Input - Annually - MMBTU/Yr | 31,200.00 | 14,601.60 |
| b. Unit Heat Efficiency - Heat Output of Control Device | 95% | 95% |
| c. Heat Available for Recovery | 29,640.00 | 13,871.52 |
| d. Heat Exchanger Efficiency for Heat Recovery | 65% | 65% |
| e. Percent Heat Recovery/Year (6 Months) | 50% | 50% |
| f. Heat Value Recovered - MMBTU/Yr | 9,633.00 | 4,508.24 |
| g. Cost/MMBTU - Provided by Facility | \$ 5.7460 | \$5.7460 |
| Total Annualized Costs | <u>\$919,422.90</u> | <u>\$967,653.05</u> |
| Uncontrolled VOC Emissions (PTE - Requested Limit) | 245.0 | 245.0 |
| Control Efficiency | 85% | 85% |
| TPY VOC Removed at Control Efficiency | 232.8 | 232.8 |

Noble Composites, Inc. Goshen, Indiana Permit Reviewer: ERG/YC Page 3 of 3 App B SPR 039-16140-00556

Cost Effectiveness, \$/Ton VOC Removed

\$ 4,414

<u>\$ 4,645</u>

Included in Capital Proposal